IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx SIR 11.0027X issue No.:0

Certificate history:

Status: **Current**

Date of Issue: **2011-04-15** Page 1 of 4

Applicant: **Rotork Controls Limited**
Brassmill Lane
Bath BA1 3JQ
United Kingdom

Electrical Apparatus: **Parking Housing/P3W Coordinator/ P3W Repeater**
Optional accessory:

Type of Protection: **Flameproof and Dust**

Marking: **Ex d IIB T4 Gb**
Ex t IIIC T120°C Db IP6X
Ta = - # °C to +70°C
(# = -20°C or -50°C)

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:
(for printed version)

Date: 2011-04-18

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira CERTIFICATION

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Manufacturer: **Rotork Controls Limited**
Brassmill Lane
Bath BA1 3JQ
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/SIR/ExTR11.0079/00

Quality Assessment Report:

GB/SIR/QAR07.0003/01

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The Parking Housing comprises of two main parts, the enclosure base and the housing/terminal cover (lid). The base is manufactured in cast aluminium alloy LM25. It comprises a circular housing with a flanged base. The flanged base is for mounting purposes. The enclosure base is provided with four (optional) threaded cable entry points. These are provided with a M25 x 1.5 thread. The base is designed to accommodate either a deep housing or a standard Rotork terminal cover.
There are two cover options that can be specified; either a deep housing or standard terminal cover. The deep housing covers are manufactured in cast aluminium alloy LM25TF, the standard terminal covers are manufactured in either cast aluminium alloy LM20 or LM25. In all cases the joint between the enclosure lid and base is a tapered spigoted, cylindrical flamepath. In all cases the lid is secured to the base with four captive M8 x 38 hexagonal socket cap-head screws. The deep housing cover is provided with up to five optional threaded cable entry points. These are provided with a M25 x 1.5 thread.

Design Options

The Parking Housing can be supplied as the 'P3W Coordinator' or the 'P3W Repeater' these are fitted with internal equipment as described below

Refer to EQUIPMENT (continued) for additional information

CONDITIONS OF CERTIFICATION: YES as shown below:

1 In accordance with clause 5.1 of EN 60079-1, the critical dimensions of the flamepaths are:

Flamepath	**Maximum Gap (mm)**	**Minimum L (mm)**
Housing & Terminal Cover/Enclosure Base	0.15	27.30

2 When supplied with an individual Parking Housing enclosure base the user is only permitted to install the following equipment taken from the Rotork Actuators as listed:

Cover Option	Internal Equipment
Deep Housing	Profibus® Disconnect PCB
Standard terminal cover	Profibus® Disconnect PCB
Deep Housing	Wireless network, associated external aerial

The user equipment comprising the terminal enclosure lid and the associated contents removed from:

IQ Electric Valve Actuators	IIB	IECEx SIR 04.0003X
IQT Electric Valve Actuators	IIB	IECEx SIR 04.0001X

3 The flamepath shall be protected by the protective device supplied with the equipment when an enclosure cover is not installed.

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EQUIPMENT(continued):

Parking Housing as complete units

Designation	Cover Option	Internal Equipment
P3W Coordinator	Deep Housing	Wireless network, associated external aerial'P3W Coordinator'
P3W Repeater	Deep Housing	Wireless network, associated external aerial and power supply 'P3W Repeater'

Parking Housing with user equipment

Cover Option	Internal Equipment
Deep Housing	Profibus® Disconnect PCB
Standard terminal cover	Profibus® Disconnect PCB
Deep Housing	Wireless network, associated external aerial

The user equipment comprising the terminal enclosure lid and the associated contents removed from

IQ Electric Valve Actuators	IIB	IECEx SIR 04.0003X
IQT Electric Valve Actuators	IIB	IECEx SIR 04.0001X

Conditions of manufacture

The Manufacturer shall comply with the following:

1. **Gas Group IIB (below-20°C to -50°C)** Each device shall be subjected to a routine overpressure test in accordance with the table below. In all cases the pressure shall be maintained for at least 10 s as required by clause 16 of IEC 60079-1:2007. There shall be no permanent deformation or damage to the enclosure.

Equipment	Hydrostatic Overpressure Test Pressure	
	Bar	Lbf/in^2
Enclosure housing base	16.53	239.68